Claims:

1. Apparatus for use in indirect bonding of orthodontic appliances comprising:

a container having a chamber;

an orthodontic placement device received in the chamber, wherein the placement device has a construction matching at least a portion of the patient's dental arch;

at least one orthodontic appliance releasably connected to the placement device and having a base with a contour that is a replica of a contour of a portion of the patient's tooth structure; and

a bonding composition on the base for bonding to the patient's tooth structure.

2. The apparatus of claim 1 wherein the placement device comprises a tray.

3. The apparatus of claim 2 wherein the tray comprises a shell and a matrix material received in the shell, wherein the matrix material has a Shore A hardness that is less than the Shore A hardness of the shell.

4. The apparatus of claim 1 wherein the placement device is a jig.

5. The apparatus of claim 1 wherein the placement device extends across a plurality of teeth of a dental arch.

6. The apparatus of claim 5 wherein the placement device extends across all of the teeth of a dental arch.

7. The apparatus of claim 5 wherein the placement device extends across the teeth of a quadrant of a dental arch.

8. The apparatus of claim 1 wherein the base is made of a curable composition.

9. The apparatus of 8 wherein the curable composition is a light-curable composition.

10. The apparatus of claim 1 wherein the container is made of a material that substantially blocks the passage of actinic radiation.

11. The apparatus of claim 1 wherein the container includes structure for substantially hindering shifting of the placement device in the chamber.

12. The apparatus of claim 1 wherein the chamber has a configuration substantially matching the configuration of the placement device.

13. The apparatus of claim 1 wherein the bonding composition comprises a light-curable composition.

14. The apparatus of claim 1 wherein the bonding composition comprises a chemical curing composition.

15. The apparatus of claim 1 wherein the bonding composition comprises one component of a two-component adhesive.

16. The apparatus of claim 1 wherein the placement device extends across essentially only a single tooth of a dental arch.

17. A method of making apparatus for orthodontic indirect bonding comprising:
providing at least one orthodontic appliance;
determining the contour of at least a portion of the patient's tooth structure;
forming a base on each appliance to replicate a portion of the patient's tooth structure;
connecting each appliance to a placement device;
applying a quantity of bonding composition to each base; and
placing the placement device within a container.

18. The method of claim 17 wherein the act of determining the contour of at least a portion of the patient's tooth structure is carried out using digital data.

19. A method of making apparatus for orthodontic indirect bonding according to claim 17 wherein the act of determining the contour of at least a portion of the patient's tooth structure is carried out by taking an impression of the patient's tooth structure.

20. A method of making apparatus for orthodontic indirect bonding according to claim 19 and including the act of making a physical replica using the impression.

21. A method of making apparatus for orthodontic indirect bonding according to claim 17 wherein the placement device comprises a tray.

22. A method of making apparatus for orthodontic indirect bonding according to claim 17 wherein the placement device is a jig.

23. A method of making apparatus for orthodontic indirect bonding according to claim 17 wherein the base is made of a curable composition.

24. A method of making apparatus for orthodontic indirect bonding according to claim 17 wherein the act of placing the placement device within a container includes the act of placing the placement device in a chamber of the container that is protected from actinic radiation.

25. A method of making apparatus for orthodontic indirect bonding according to claim 17 and including the act of sending the container to an orthodontic practitioner after the placement device is placed within the container.